

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-16. (cancelled).

17. (currently amended) A roller bearing (10) comprising:

a plurality of bearing rollers (12) located between confronting bearing surfaces (16,19),

said confronting bearing surfaces being rotatable one relative to the other about ~~the~~ a rotational axis of the bearing, and ~~said bearing comprising~~

biasing means (18) which provides a biasing force acting in a direction between said confronting bearing surfaces (16,19), ~~whereby~~ said biasing force ~~is~~ provided by deformability of i) at least one of the confronting bearing surfaces (16,19) or ~~by deformability of the or each roller~~ ii) at least one of said bearing rollers (20), ~~characterised in that~~

wherein i) an edge region of a bearing surface of at least one of said confronting bearing surfaces or ii) a bearing surface of [[a]] said at least one bearing roller, when in an unstressed condition, comprises a zone (15,23) which protrudes above ~~the~~ an adjacent surface region ~~of~~ to said bearing surface, which edge region, in the assembled bearing, exerts the

aforementioned biasing force, in such a way that under all load conditions for which the bearing is designed for use, each bearing roller is retained in contact with each of said confronting bearing surfaces.

18. (currently amended) A roller bearing according to claim 17, wherein the body of material which defines at least one of said confronting bearing surfaces, or the bearing surface of a roller, ~~[[is]]~~ comprises an undercut at an edge region of that bearing surface thereby to provide between the undercut and bearing surface a deformable overhang region (18,28).

19. (previously presented) A roller bearing according to claim 17, wherein a bearing ring (13) defines one of said confronting bearing surfaces and is provided with an undercut (17), said undercut being provided in that half of the thickness of the ring which is adjacent the bearing surface of said ring.

20. (previously presented) A roller bearing according to claim 17, wherein each of the two edge regions of a bearing surface is provided with a deformable overhang.

21. (previously presented) A roller bearing according to claim 17, wherein at least one of the confronting bearing

surfaces has associated therewith a deformable component (30,40) to serve as said biasing means.

22. (previously presented) A roller bearing according to claim 21, wherein said deformable component (30) is deformable by virtue of the shape and flexibility of the component.

23. (previously presented) A roller bearing according to claim 21, wherein the deformable component (40) is deformable by virtue of compressibility of the material of the component.

24. (previously presented) A roller bearing according to claim 21, wherein the deformable component is a biasing ring (30) positioned between the bearing surface (33) of one of said confronting bearing surfaces and an abutment surface (34) associated with said bearing surface.

25. (previously presented) A roller bearing according to claim 21, wherein the biasing means is a biasing ring (40) provided substantially centrally between end regions of a bearing surface.

26. (currently amended) A roller bearing according to claim 17 and which is a radial ~~type~~ roller bearing.

27. (previously presented) A roller bearing according to claim 17, wherein the bearing rollers are cylindrical.

28. (currently amended) A roller bearing according to claim 17, wherein the bearing rollers each comprise ends (21, 22) with a recess (25) defining a pair of deformable annular lip regions (28), the zone being located on a surface of the lip regions remote from the recess ~~rollers are taper type rollers.~~

29. (currently amended) A roller bearing according to claim 17, wherein the roller bearing is mounted on one of A ~~multi-stage gear unit comprising~~ a high speed and intermediate speed gear unit shaft ~~wherein at least one of said shafts is supported by a roller bearing (10) according to claim 17.~~

30. (previously presented) A roller bearing according to claim 18, wherein a bearing ring (13) defines one of said confronting bearing surfaces and comprises said ~~is provided with~~ ~~a~~ undercut (17), said undercut being provided in that half of the thickness of the ring which is adjacent the bearing surface of said ring.

31. (previously presented) A roller bearing according to claim 22, wherein the deformable component (40) is deformable by virtue of compressibility of the material of the component.

32. (previously presented) A roller bearing according to claim 22, wherein the deformable component is a biasing ring (30) positioned between the bearing surface (33) of one of said confronting bearing surfaces and an abutment surface (34) associated with said bearing surface.

33. (previously presented) A roller bearing according to claim 23, wherein the deformable component is a biasing ring (30) positioned between the bearing surface (33) of one of said confronting bearing surfaces and an abutment surface (34) associated with said bearing surface.

34. (previously presented) A roller bearing according to claim 22, wherein the biasing means is a biasing ring (40) provided substantially centrally between end regions of a bearing surface.

35. (cancelled).

36. (cancelled).

37. (new) A roller bearing (10) comprising:  
an outer bearing ring (11) with a first bearing surface (19);

an inner bearing ring (13) with a second bearing surface (16);

a plurality of bearing rollers (12, 20) with respective roller surfaces, said bearing rollers positioned between said outer bearing ring and said inner bearing ring so that said first bearing surface and said second bearing surface are confronting bearing surfaces (16, 19) with the first bearing surface rotatable relative to the second bearing surface; and

a biasing part (18, 23, 30, 42) providing a sufficient bias force acting, in an unloaded condition, to separate an adjacent portion of a corresponding one of said confronting bearing surfaces (16, 19) from a corresponding portion of an adjacent roller surface of one of said bearing rollers,

said biasing part located in one of

i) an edge region of one of said inner and outer rings, said biasing part at said edge region providing a deformability of said one ring at said adjacent portion of said one confronting bearing surface (16,19) thereby resulting in the bias force acting in the direction between said confronting bearing surfaces (16,19) to separate the adjacent portion of the corresponding one said confronting bearing surface (16, 19) from the corresponding portion of the adjacent roller surface of the one said bearing roller, and

ii) the roller bearing surface of said one bearing roller, said biasing part at the roller bearing surface portion

of said one bearing roller providing a deformability of said one bearing roller resulting in the bias force acting in the direction between said confronting bearing surfaces (16, 19) to separate the adjacent portion of the corresponding one said confronting bearing surface (16, 19) from the corresponding portion of the adjacent roller surface of the one said bearing roller, wherein,

said biasing part at said edge region or said biasing part at said roller bearing surface defines, in the unloaded condition, a protruding zone (15, 23),

said protruding zone, in the unloaded condition, protruding above an adjoining surface region such that the adjacent portion of the corresponding one said confronting bearing surface (16, 19) is free on contact with the corresponding portion of the adjacent roller surface of the one said bearing roller,

and, in an assembled condition, said biasing part relocates such that the adjacent portion of the corresponding one said confronting bearing surface (16, 19) is in contact with the corresponding portion of the adjacent roller surface of the one said bearing roller.

38. (new) A roller bearing according to claim 37, wherein the biasing part is at least one compressible ring (30, 40) located within a groove at said edge region of said one ring.